Global Electric Motorcars, LLC (GEM) A DaimlerChrysler Corporation Company

Frequently Asked Questions regarding legalization of Low Speed Vehicles (LSVs), aka Neighborhood EVs, for Public Road Use

What are other states doing on legalizing LSVs for use on Public Roads?

Forty states in the U.S. have specific LSV laws that permit LSVs to be driven on public roads, mainly where speed limits are 35 mph and less. By and large, the states have adopted the Federal safety standards (FMVSS500), but there are some states with their own standards and Michigan is one of these states. Of the states with no specific LSV laws, there are some that are registering LSVs for public road use under other existing regulatory framework.

Why not just tweak the Michigan statute to comply with the Federal standards?

The idea is for Michigan, in fact for all states, to adopt the Federal definition and requirements for low speed vehicles by reference. This makes it much easier for manufacturers, like GEM, to build only one vehicle for the U.S. which complies with all requirements for safety and performance. Two sections of the Federal standards are implicated. The first is 49 C.F.R. 571.3, which is the federal definition for "low-speed vehicle". The second is 49 C.F.R. 571.500, which is the "requirements" for low-speed vehicles. Adoption of the Federal definition and standards will also avoid having to amend state statutes in the event of a change at the Federal level. A comparison of the current Federal and Michigan LSV definitions and requirements is attached for reference.

To this latter point, it should be understood that the LSV class of vehicles was established in 1998, so they are a relatively new type of vehicle. There may be more refinements to be made to existing legislation as all entities gain more experience with them. The Federal definition has already been amended twice. For example, last Fall the definition was changed to include LSV trucks and to adopt a weight limit of 2,500 lbs GVWR. (See 70 Fed. Reg. 48313 (August 17, 2005)). More recently, on April 19, 2006, the GVWR weight limit was increased to 3000 lbs. (See 71 Fed. Reg. 20026 (April 19, 2006)).

<u>Does MI law limit GEM now, or is this request in anticipation of future changes being made in the vehicles?</u>

MI law limits GEM now. The Michigan Vehicle Code (section 257.25b) already references the Federal standards for LSVs but then goes further by limiting them to "a capacity of not more than 4 persons including the driver and being 2,200 pounds or less in weight". The 4 person limit precludes the sale of GEM's 6 passenger vehicle that was introduced into the market in April 2006. The 2,200 pound weight limit will also preclude the sale of GEM's first real truck product, which has a GVW of 3000 pounds, when it is introduced into the market in October, 2006. Adoption of the Federal standard eliminates any questions as to preemption on passenger number, brings the GVW up to a level consistent with the Federal law and makes future changes at the Federal level automatic within the State of Michigan.

Is this a DCC-GEM issue only or do other auto companies have concerns?

DCC-GEM is the only large OEM manufacturer of LSVs at this time. Other small companies are beginning to produce and sell LSVs, but the numbers they sell are small. In discussions with these smaller companies at various shows and conferences, they have the same concerns and prefer consistency with Federal standards.

If MI was to adopt the Federal standard for LSVs, does this make the vehicles any less safe?

No. Since 1998, without a passenger or maximum weight limit, LSVs have evolved a remarkable safety record. There are over 40,000 LSVs driven on public roads in the U.S. today. There have only been a handful of accidents reported since this class of vehicles was allowed on public roads in 1998 and no serious injuries have resulted from these accidents. The accident rate per mile driven is approximately 10 times lower than that for conventional vehicles. It is believed that the low accident rate is because these vehicles are generally driven during the day, in light traffic and, of course, where the traffic speeds are 35 mph and under. In addition, the vehicles are very maneuverable and highly visible. In fact, they are much safer to drive, have more safety equipment and provide much more protection to occupants than motorcycles, motorbikes and motor scooters that, basically, travel on any and all roads.

State of Michigan LSV Definition Compared to the Federal LSV Definition (FMVSS 500)

MICHIGAN VEHICLE CODE ACT 300 OF 1949 SEC 275.25B	"Low-speed vehicle" means an electrically powered vehicle designed to be operated at a speed not to exceed 35 miles per hour with a capacity of not more than 4 persons including the driver of 2,200 pounds or less in weight as described in 49 C.F.R. 571.500 that is equipped with, but not limited to, the following:	 Headlamps Front and rear turn signal lamps Tail lamps Stop lamps Reflex reflectors: one red on each side as far as to the rear as practicable and one red on the rear An exterior mirror mounted on the driver's side of the vehicle and either an exterior mirror mounted on the passenger side of the vehicle or an interior mirror. A parking brake A windshield that meets the standards prescribed in this act. A vehicle identification number A vehicle identification number A seat belt assembly conforming to the requirements of this act installed at each designated seating position 	
FMVSS 500 49 C. F.R. 571.500	Has 4 wheels in contact with the ground in normal operation Has a speed attainable in one mile of more than 20 mph and not more than 25 mph on a paved level surface and has a GVWR of less than 3000 lbs. Each LSV shall be equipped with the following 10 items of safety equipment and a compliance certification label.	 Headlamps Front and rear turn signal lamps Tail lamps Stop lamps Reflex reflectors: one red on each side as far to the rear as practicable, and one red on the rear An exterior mirror mounted on the driver's side of the vehicle and either an exterior mounted on the passenger's side of the vehicles or an interior mirror. A parking brake A windshield that conforms to the FMVSS standard on glazing. Sec 49 CFR 571.209 A VIN that conforms to the requirements of part 565 vehicle identification number of this chapter. A Type 1 or Type 2 seat belt assembly conforming to Sec.521.209 of this part, FMVSS 209, Seat belt assemblies, installed at each designated seating position. 	